g of the compound (1). In a light microscopic examination of the sample after completion of the irradiation, no through hole formation was observed even when the laser power arriving at the surface was 100 mW.

an alkoxyalkyl group containing, as a whole, 2 to 8 carbon atoms, a sulfoalkyl group containing 1 to 8 carbon atoms or a carboxyalkyl group containing, as a whole, 2 to 9 carbon

EFFECTS OF THE INVENTION

The polymethine compound of general formula (I) shows less absorption in the visible region, and the near infrared absorber comprising this compound can be used with advan- 20 tage in laser thermal transfer recording materials and laser heat-sensitive recording materials having good sensitivity to laser light with a high light-to-heat conversion efficiency and, therefore, enabling high-speed recording. The polymein various solvents used for making the light-to-heat conversion layer of starting plates for direct printing plate making and has good compatibility with various binder resins and other components, facilitating preparation of coating compositions. It can thus form uniform light-to-heat 30 conversion layers and is particularly suited for use in the manufacture of starting plates for direct printing plate mak-

What is claimed is:

1. A polymethine compound which has the following 35 general formula:

$$R_2HC$$
 R_3
 R_4
 R_1
 R_3
 R_4
 R_3
 R_4
 R_3
 R_4
 R_5
 R_7
 R_8
 R_8

wherein R₁ represents an alkyl group, which may optionally be substituted, R2 represents a hydrogen atom or a lower 55 alkyl group, R₃ and R₄ each independently represents a lower alkyl group or R₃ and R₄ may combinedly form a cyclic structure, L is an alkylene group which is required for the formation of a cyclic structure and may optionally be substituted, one or more carbon atoms of which cyclic 60 structure may be replaced by some other atom(s) or atomic group(s), D and E each independently represents an oxygen atom or a methylene group, X represents a hydrogen or halogen atom or a substituted amino group, and Z represents a charge-neutralizing ion.

2. A polymethine compound as claimed in claim 1, wherein R₁ is an alkyl group containing 1 to 8 carbon atoms,

3. A polymethine compound as claimed in claim 1 wherein L is an alkylene group containing 2 to 4 carbon atoms

4. A polymethine compound as claimed in claim 1, wherein Z is Cl⁻, Br⁻, I⁻, ClO₄⁻, BF₄⁻, CF₃CO₂⁻, PF₆⁻, SbF₆, CH₃SO₃, a p-toluenesulfonate ion, Na+, K+ or a triethylammonium ion.

5. A polymethine compound as claimed in claim 1 thine compound of general formula (I) is very highly soluble 25 wherein each of R3 and R4 is a methyl group or R3 and R4 combinedly form a cyclopentane or cyclohexane group together with the carbon atom to which they are bound.

> 6. A polymethine compound as claimed in claim 1 wherein X is H, Cl, Br or a diphenylamino group.

> 7. A method of producing the polymethine compound of claim 1 which comprises subjecting an indolenium compound represented by the general formula (II):

$$R_{2}HC$$

$$R_{3}$$

$$R_{4}$$

$$CH_{3}^{*}(Z_{1})n$$

$$R_{1}$$

$$(II)$$

wherein R, represents an alkyl group, which may optionally be substituted, R2 represents a hydrogen atom or a lower alkyl group, R₃ and R₄ each independently represents a lower alkyl group or R3 and R4 may combinedly form a cyclic structure, D and E each independently represents an oxygen atom or a methylene group, Z1 represents a chargeneutralizing ion and n represents an integer of 0 or 1, and a diformyl compound represented by the general formula (III):

wherein X represents a hydrogen or halogen atom or a substituted amino group and L is an alkylene group which is required for the formation of a cyclic structure and may optionally be substituted, one or more carbon atoms of which cyclic structure may be replaced by some other atom(s) or atomic group(s), or a dianil compound represented by the general formula (IV):

(IV)

substituted amino group and L is an alkylene group which is required for the formation of a cyclic structure and may optionally be substituted, one or more carbon atoms of which cyclic structure may be replaced by some other atom(s) or atomic group(s), to condensation reaction in the presence of a fatty acid salt and a dehydrating organic acid.

8. A near infrared absorber which comprises the polymethine compound of claim 1.

9. An original plate for direct plating for printing comprising a light-to-heat conversion layer formed on a substrate, characterized in that said light-to-heat conversion layer contains the polymethine compound of claim 1.

10. A method of making a printing plate which comprises wherein X represents a hydrogen or halogen atom or a 10 irradiating the original plate for direct plating of claim 9 with a laser beam from a light source laser which has a light emission wavelength region within the range of 750 nm to 900 nm.